



Appln No. 10/727,490
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A tool, comprising:
an inner barrel having a first end and a second end; ~~[[and]]~~
a corkscrew deflector coupled to the inner barrel originating at the first end and extending towards the second end; and
an inlet plate coupled to the first end of the inner barrel, the inlet plate having an aperture defined by a space between two concentric arcs, the aperture substantially following the contour of an edge of the inlet plate;
wherein the edges of the aperture in the inlet plate are substantially tapered.
2. (Cancelled)
3. (Currently Amended) The tool of claim ~~[[2]]~~ 1, further comprising an outer barrel coupled to the corkscrew deflector; and
an input sleeve, the input sleeve coupled to the inlet plate, the input sleeve having an outer diameter substantially equal to the outer diameter of the outer barrel.
4. (Original) The tool of claim 3, wherein the input sleeve has an unobstructed bore.
5. (Cancelled)
6. (Cancelled)
7. (Original) The tool of claim 1, wherein the corkscrew deflector extends at least 90 degrees around the inner barrel.

8. (Cancelled)

9. (Original) The tool of claim 1, wherein the corkscrew deflector forms an angle with respect to the inlet plate of between 15 and 75 degrees.

10. (Original) The tool of claim 9, wherein the angle is 70 degrees.

11. (Cancelled)

12. (Original) The tool of claim 1, further comprising an outer barrel coupled to the corkscrew deflector, a fluid chamber being formed between the inner barrel and the outer barrel.

13. (Original) The tool of claim 12, wherein the outer barrel has an output neck on a distal end of the outer barrel extending away from the inlet plate, the output neck having a diameter less than a diameter of the inlet plate.

14. (Original) The tool of claim 12, further comprising at least one side inlet in the outer barrel.

15. (Original) The tool of claim 1, wherein at least one end of the inner barrel is substantially pointed.

16. (Withdrawn) A fluid transport system, comprising: a first conduit having an input end and an output end; a first tool having a first end and a second end, the first tool being coupled to the output end of the first conduit at a first end of the first tool; and a second conduit having an input end and an output end, the input end of the second conduit being coupled to a second end of the first tool, the first tool being configured to organize a fluid in the fluid transport system, the outer diameters of the first conduit, the first tool and the second conduit being substantially equal.

17. (Withdrawn) The fluid transport system of claim 16, wherein the first tool includes: an outer barrel; an inner barrel substantially concentric with the outer barrel, the inner barrel

having a substantially cylindrical end and a substantially conical end, a fluid chamber being formed between an inner surface of the outer barrel and an outer surface of the inner barrel; and a corkscrew deflector disposed in the fluid chamber and coupled between the inner surface of the outer barrel and the outer surface of the inner barrel at the substantially cylindrical end of the inner barrel.

18. (Withdrawn) The fluid transport system of claim 17, further comprising an inlet plate coupled to the end of the outer barrel and the substantially cylindrical end of the inner barrel, the inlet plate having an opening to allow a fluid to enter the fluid chamber, the corkscrew deflector configured to deflect the fluid in a direction that is tangential to a longitudinal axis of the inner barrel to create a vortex flow in the fluid.

19. (Withdrawn) The fluid transport system of claim 17, wherein the first tool further includes an input sleeve, the input sleeve coupled to an input side of the inlet plate, the input sleeve having an outer diameter substantially equal to the outer diameter of the outer barrel.

20. (Withdrawn) The fluid transport system of claim 19, wherein the input sleeve does not include a deflector.

21. (Withdrawn) The fluid transport system of claim 17, wherein the corkscrew deflector has a turn of at least 90 degrees.

22. (Withdrawn) The fluid transport system of claim 17, wherein the corkscrew deflector forms an angle with respect to the inlet plate of between 15 and 75 degrees.

23. (Withdrawn) The fluid transport system of claim 17, wherein the first tool further includes an aperture in the side of the outer barrel in fluid communication with the first conduit.

24. (Withdrawn) The fluid transport system of claim 16, further comprising: a second tool coupled to the output end of the second conduit at a first end of the second tool; and a third conduit having an input end and an output end, the input end being coupled to the second end of

the second tool, the second tool being configured to organize the fluid in the fluid transport system.

25. (Withdrawn) A method for accelerating a fluid in a fluid transport system, comprising: receiving a fluid from an input conduit; deflecting the fluid in the vortex chamber using a corkscrew deflector originating at the inlet plate to create a vortex; and outputting the fluid at an output conduit.

26. (Withdrawn) The method of claim 25, further comprising screening the fluid with an inlet plate to direct the fluid to a vortex chamber.

27. (Withdrawn) The method of claim 26, further comprising directing a portion of the fluid through at least one side inlet in the vortex chamber.

28. (Withdrawn) The method of claim 25, wherein the corkscrew deflector has a turn of at least 90 degrees.

29. (Withdrawn) The method of claim 25, wherein the corkscrew deflector has an angle with respect to the inlet plate of between 15 and 75 degrees.

30. (Withdrawn) A fluid transport system, comprising an input conduit; a vortex chamber fluidly coupled to the input conduit at a first end of the vortex chamber at least a first portion of the fluid entering the vortex chamber tool in a longitudinal direction, the vortex chamber having a corkscrew deflector; and an output conduit fluidly coupled to the vortex chamber at a second end of the vortex chamber.

31. (Withdrawn) The fluid transport system of claim 30, wherein the vortex chamber has at least one side inlet so that a second portion of the fluid enters the vortex chamber in a direction substantially perpendicular to the longitudinal direction.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (New) A tool comprising:

an inner barrel having at least one side aperture;

an outer barrel being concentric with the inner barrel to define a first fluid chamber between the inner barrel and the outer barrel;

a corkscrew deflector disposed in the first fluid chamber;

an outer casing concentric with the outer barrel to define a second fluid chamber between the outer barrel and the outer casing, the second fluid chamber being in fluid communication with the inner barrel through the at least one side aperture; and

an inlet plate having a first aperture and a second aperture, the first aperture adapted to provide fluid communication between an inlet and the first fluid chamber, and the second aperture adapted to provide fluid communication between the inlet and the second fluid chamber.

36. (New) The tool of claim 35, wherein an end of the inner barrel proximate to an output of the fluid chamber is substantially tapered.

37. (New) The tool of claim 35, wherein an end of the outer barrel proximate to an output of the fluid chamber is tapered.

38. (New) A tool comprising:

an outer barrel having an inlet and an outlet;

an inner barrel substantially concentric with the outer barrel and disposed between the inlet and the outlet; and

a corkscrew deflector disposed between the inner barrel and the outer barrel, the corkscrew deflector coupled to an outer surface of the inner barrel and an inner surface of the outer barrel;

wherein the corkscrew deflector is adjustable between a first position having a first corkscrew angle and a second position having a second corkscrew angle different from the first corkscrew angle.

39. (New) The tool of claim 38, wherein a length of the inner barrel is adjustable between a first length corresponding to the first corkscrew angle and a second length corresponding to the second corkscrew angle.

40. (New) The tool of claim 39, wherein the inner barrel is telescopic.

41. (New) The tool of claim 38, further comprising a stop coupled to a portion of the inner barrel, the stop configured to couple the inner barrel to the inner surface of the outer barrel.

42. (New) A tool comprising:

an outer barrel having an inlet and an outlet;

an inner barrel substantially concentric with the outer barrel and disposed between the inlet and the outlet;

a corkscrew deflector disposed between the inner barrel and the outer barrel, the corkscrew deflector coupled to an outer surface of the inner barrel and an inner surface of the outer barrel to define a helical fluid chamber;

wherein the corkscrew deflector extends at least 90 degrees around the inner barrel; and

wherein the corkscrew deflector directs fluid entering the outer barrel from the inlet through the helical fluid chamber to provide a vortex flow at the outlet.